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Bombay Natural History Society

Mission Statement

‘Conservation of nature, primarily biological diversity through action, based on research, education and public awareness.’

BNHS is BirdLife International partner designate*Together for birds and people*

BirdLife International is a global partnership of conservation organisations, represented in over 100 countries, working for the diversity of all life through the conservation of birds and their habitats.

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by Asad R. RahmaniPhoto of Dr. Asad R. Rahmani on Editorial page by
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Need for better population estimates of Indian waterbirds

The main aim of the IBCN is to spread knowledge about birds and bring people together for saving birds and their habitats. I strongly believe that good knowledge leads to good conservation decisions and actions on the ground. It is an old axiom that knowledge is the only thing that increases when shared. I have been a full-teacher in the Aligarh Muslim University for six years and there is nothing better than sharing your knowledge with students and colleagues. The glow in the eyes of students during lectures, their inquisitiveness, their raw young energy, their traditional Indian respect to a guru, the subtle expression when something is not understood or interests them, the noble relationship between teachers and students – I miss all of them. The frequent workshops, which I arrange for IBCN partners, are a nostalgic substitute for my university days.

As an important organization, BNHS/IBCN receives many books, reports and documents, not easily accessible to our partners. Whenever I read a good book or a research paper/report, I want to share it with you. I regularly forward good research papers in an electronic format to the state coordinators. If you want to read these papers, please contact your state coordinator. If you come across a good paper or report, send it to the IBCN Secretariat. Remember the axiom – knowledge increases when shared.

It gives me great pleasure to share this special issue of the *Mistnet* on the waterbird population estimates. Every four or five years, the Wetlands International updates the population estimates of waterbirds, mainly based on the Annual Waterbirds Count (AWC). As some birds are widely distributed, migrate through different continents, the Wetlands International (WI) has wisely decided to divide them into biogeographical populations. Please note that these population estimates are very rough and indicative, except for some species where the data are based on scientific census methods or where the population is small and spatially limited to a small area (either seasonally or through the year) and thus easily counted. For most species, particularly ducks, waders, rallids, and egrets, only rough estimates, or what we call 'guesstimate' in ornithological parlance, are available. Here I must emphasize the role of IBCN partners and state coordinators in improving the guesstimates by collecting good data during the Annual Waterbird Count. Good data is like a brick of a building. For a building to stand tall and proudly, it needs a strong foundation and strong walls. This strength comes from each brick. A building with weak bricks collapses quickly (Here I am talking figuratively and not literally of government buildings!). We can bring out a beautiful glossy report but if the data (bricks) are weak, no external gloss can hide it.

It is the duty of all of us to collect good data for the AWC (and other surveys/censuses). Remember, each contribution is a like brick to the global edifice of the AWC. Whether the Indian part of the AWC stands or falls, will depend on us.

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1% Biogeographical population estimates for waterbirds in India

Compiled and extracted by Noor Khan¹

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There is still a huge gap in our knowledge of the world's waterbirds. This is highlighted in four important publications on Waterbird Population Estimates by the Wetlands International. Many waterbird populations are poorly known, and for many more, knowledge of the population trends is lacking.

The first edition of *Waterfowl Population Estimates* (Rose and Scott 1994) provided a global overview of the status of the world's waterbird populations. This edition was the base for information on waterbirds around the

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world. The information was also used to identify important wetlands, and to provide the basis for the so-called 1% criterion.

The Second edition of *Waterfowl Population Estimates* (Rose and Scott 1997) followed a similar format to the first edition but included many more population estimates and much more information on population trends.

The Third edition was renamed as *Waterbird Population Estimates* (Wetlands International 2002) and had more information. In that edition tables and species distribution maps for all the species, English vernacular names of all species and some distinct subspecies, and short descriptions of both the breeding and non-breeding ('wintering') ranges of all populations, was given. A 'Notes' column was added to the tables, and this has permitted the presentation of many more explanatory notes, particularly with regard to taxonomic treatment and the derivation of population estimates. The term 'waterbirds' has been adopted by the Wetlands International in preference to

the term 'waterfowl' because of the different meanings of that word in different parts of the English speaking world.

The Bombay Natural History Society used the third edition, *Waterbird Population Estimates*, to identify the most important waterbirds sites based on 1% biogeographic population in the region and published the '*Important Bird Areas in India: priority sites for conservation*' (Islam and Rahmani, 2004).

The Fourth edition *Waterbird Population Estimates* (Wetlands International 2006) published in 2006 has more updated and detailed information on waterbirds and 1% biogeographic population, and also includes distributional maps. The Fourth Edition also includes crucial information necessary for the conservation of species, or population of a species. It also includes:

- Where individuals live (geographical distribution)
- How many individuals exist

(population estimates)

- Whether numbers are increasing, stable or decreasing (population trend).

The fourth Edition provides updated information on 878 species recognized by Wetlands International as "waterbirds. This publication contributes to wetland conservation policy at the international level by providing the authoritative basis of Criterion 6 of the Ramsar Convention on Wetlands, under which any site that regularly holds 1% or more of a waterbird population qualifies as a Ramsar or IBA site under the Convention.

The analysis shows that at the global level, 44% of populations for which trend data are available are decreasing or extinct, 34% are stable and only 17% are increasing. Altogether, 12 families have half or more of their populations showing a decreasing trend: Darters, Storks, Shoebill, Screamers, Rails, Finfoots, Jacanas, Painted-Snipes, Stone Curlews, Plovers, Seedsnipes and Skimmers (Wetlands International 2006).



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It is also mentioned that in every region, the proportion of known populations exhibiting a decreasing trend markedly exceeds the proportion exhibiting an increasing trend.

- The situation is most critical in Asia, where a disquieting 62% of known populations are decreasing or extinct, and only 10% are increasing. Asia holds 815 waterbird populations -35% of those described – and the fact that so many of them suffer from a poor conservation status is cause for very considerable concern.
- The next highest proportion of decreasing populations, 48% is found in Africa followed by Oceania (45%), South America (42%), Europe (41%) and North America (37%).
- 17% of waterbird populations in Oceania have gone extinct, a reflection of the impact of human settlement on specialized island forms.

The analysis in the Fourth Edition of Waterbird Population Estimates shows that the threat of Globally

Threatened waterbird species, identified by BirdLife International on behalf of IUCN (www.birdlife.org/datazone/species/index.html), worsened to a considerable degree between the last review of Waterbird Estimate in 2002 and the current review in 2006. Altogether 23 waterbird species have a higher threat status in 2006 than in 2002, and only 10 species have a lower threat status.

We have extracted the information related to India (1% threshold of the biogeographic region) given in the following table. It is requested to use this data on waterbirds, especially 1% biogeographic population, in all upcoming publications in the region. Further information on this publication is available from Wetlands International (www.wetlands.org).

Categories and criteria to identify Important Bird Areas: The four main categories and criteria are the standard guidelines for the identification of IBAs designed by the BirdLife International

(BirdLife International, undated). These guidelines were used with scientific backup and with common sense.

A1 Globally Threatened species: The site regularly holds significant numbers of a globally threatened species, or other species of global conservation concern. This category refers to species classified as globally threatened with extinction, Vulnerable, Conservation Dependent or Data Deficient according to the new IUCN criteria for threatened status. The site qualifies if it is known, estimated or thought to hold a population of a species as categorized to this new IUCN criteria. Population-size thresholds for globally threatened species are set regionally, as appropriate, to help in site selection. The threatened waterbirds list is given in the threshold list.

A2 Restricted Range Species: The site is known or thought to hold a significant component of the restricted-range species whose breeding distributions define an Endemic Bird

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Area (EBA) or Secondary Area (SA).

A3 Biome-Restricted Assemblages: The site is known or thought to hold a significant component of the group of species whose distributions are largely or wholly confined to one biome.

A4 Congregations: This category applies to those species that congregate at sensitive sites when breeding or wintering, or while on passage. The term 'water-bird' is used here in the same sense as the Ramsar Convention uses 'waterfowl' and covers the list of families more precisely defined by Wetlands International (Rose and Scott 1994). Congregatory non-waterbird species (A4ii) include both terrestrial species and families of seabird such as Procellariidae, Hydrobatidae, Pelecanidae, Phaethontidae, Sulidae, and Fregatidae.

This category has four subdivisions:

(A4i). Site known or thought to hold, on a regular basis,³ 1% of a biogeographic population of a congregatory waterbird species. For the

thresholds of this criterion, relevant flyway populations are combined to produce biogeographic population estimates (see the 1% threshold list).

(A4ii) Site known or thought to hold, on a regular basis,³ 1% of the global population of a congregatory seabird or terrestrial species. This category covers non-water bird or terrestrial birds or sea birds.

(A4iii) Site known or thought to hold, on a regular basis,³ 20,000 waterbirds or³ 10,000 pairs of seabirds of one or more species. Use of this criterion is discouraged where data quality permits A4i and A4ii to be used.

(A4iv) Site known or thought to be a 'bottleneck site' where at least 20,000 storks (*Ciconiidae*), raptors (*Accipitriformes* and *Falconiformes*) or cranes (*Gruidae*) pass regularly during spring or autumn migration.

Categories of criteria for site selection under the Ramsar Convention (adopted at the Conference of the Parties, 7 May 1999).

1. Representative, rare, or unique example of a natural or near-natural wetland type found within the appropriate biogeographic region.
2. Supports vulnerable, endangered, or critically endangered species or threatened ecological communities.
3. Supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.
4. Supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.
5. Regularly supports 20,000 or more waterbirds.
6. Regularly supports 1% of the individuals in a population of one species or subspecies of waterbird. Criteria A4i and A4iii identify wetlands of international importance (Ramsar Sites), being similar to Ramsar criteria 5 and 6 respectively in the Box.



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‘Biogeographic population’

‘Biogeographic’ is used in the sense of a zoogeographic realm, e.g. the Palearctic, which are large geographical regions in which the organisms present tend to be different from those of other realms. Thus such regions are

characterized largely through the shared distribution patterns of many species. All ‘populations’ of a given species that are resident or migratory through this region are combined to form the ‘biogeographic population’. We do not have sufficient flyway

population information at the moment, but through the IBA programme we may be able to get good information in future.

1% thresholds and applying the criteria: 1% threshold figures have been defined for all congregatory waterbird species, including species for which no thresholds are currently recognized under the Ramsar Convention. Wetlands International has collaborated in generating numeric thresholds from range estimates and from unpublished population data.

There is a logical inconsistency between criterion A4i for waterbirds (1% or more of the biogeographic population) and criterion A4ii for seabirds (1% or more of global population of seabirds). It was felt, however, that the alternative of using 1% of the global population for waterbirds would, as well as be departing from the criteria used under the Ramsar Convention, with insufficient biological justification,



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since relatively well defined, discrete flyway populations can be distinguished within Asia for many migratory waterbird species. Taking 1% of global population would over-emphasise waterbirds endemic to Asia, since many widely distributed species may rarely occur at congregations exceeding 1% of the global population, over much of their range (Wetlands International 2006).

A4iii and A4iv criteria are applied at the site level only, not to individual species.

The A4iv criterion embraces sites over which flying migrants concentrate,

e.g. at narrow sea-crossings, along mountain ranges or through mountain passes. Conservation of the land beneath may be necessary to protect the site and its birds from threats such as shooting and the construction of lethal obstacles such as power-lines and high radio-masts. Also included under A4iv are migratory stop-over sites and nocturnal roosts which may not hold 20,000 or more storks, raptors or cranes at any one time but which, nevertheless, do hold such numbers over a relatively short period due to the rapid turnover of birds on passage (e.g. roosting sites of Amur Falcon *Falco amurensis*).

How do the IBA criteria relate to the identification of Ramsar sites under the Ramsar Convention:

The Ramsar (or Wetlands) Convention defines a wetland as “an area of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed 6m” (Article 1). Article 2.1 of the Convention also states that “the boundaries of each wetland may incorporate riparian and coastal zones adjacent to the wetlands, and islands or bodies of marine water deeper

RAMSAR SITES IN INDIA

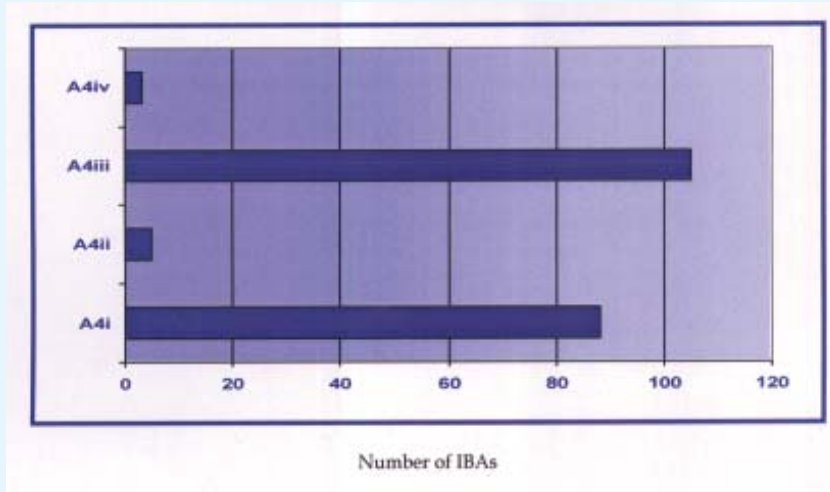
IBA Codes	Site Name	State	IBA criteria	Ramsar criteria
	Ashtamudi Lake*	Kerala		Criterion 5
IN-OR-01	Bhitarkanika Mangroves	Orissa	A1, A4i	Criteria 2 and 6
IN-MP-03	Bhoj Wetland	Madhya Pradesh	A1, A4i, A4iii	Criteria 2, 5 and 6
IN-OR-03	Chilika Lake	Orissa	A1, A4i, A4iii	Criteria 2, 5 and 6
IN-AS-14	Deepor Beel	Assam	A1, A4iii	Criteria 2 and 6
	East Calcutta Wetlands*	West Bengal		
IN-PB-01	Harike Wetlands	Punjab	A1, A4i, A4iii	Criteria 2, 5 and 6
IN-PB-02	Kanji lake	Punjab	A4i, A4iii	Criteria 5 and 6
IN-RJ-07	Keoladeo National Park	Rajasthan	A1, A4i, A4iii	Criteria 2, 5 and 6
IN-AP-04	Kolleru Lake	Andhra Pradesh	A1, A4i, A4iii	Criteria 2, 5 and 6
IN-MN-06	Loktak Lake	Manipur	A1, A4iii	Criteria 2 and 6
IN-TN-20	Point Climere Wildlife And Bird Sanctuary	Tamil Nadu	A1, A4i, A4iii	Criteria 2, 5 and 6
IN-HP-19	Pong Dam Lake	Himachal Pradesh	A1, A4i, A4iii	Criteria 2, 5 and 6
IN-PB-03	Ropar Lake	Punjab	A4iii	Criterion 6
IN-RJ-16	Sambhar Lake	Rajasthan	A1, A4i, A4iii	Criteria 2, 5 and 6
	Sasthamkotta Lake*	Tamil Nadu		
IN-JK-19	Tsomoriri	Jammu and Kashmir	A1	Criterion 2
IN-KR-23	Vembanad	Kerala	A4i, A4iii	Criteria 5 and 6
IN-JK-20	Wular Lake	Jammu and Kashmir	A1, A4iii	Criteria 2 and 6

*Not an IBA in India

A4 Congregatory species: Nearly 150 IBAs were identified using the congregatory criteria (Islam & Rahmani 2004). The A4i criterion talks about the =1% of a biogeographic population of a congregatory waterbird species. Eighty-eight IBAs have been identified using the updated threshold list published in 2006 by the Wetlands International (Wetlands International 2006). A4ii is about =1% of the global population of a congregatory seabird or terrestrial species; five IBAs have been identified using this criterion, e.g. Habang in Assam and Velavadar in Gujarat. The A4iii is about the presence of =20,000 waterbirds; 105 sites qualify this criterion. The A4iv is about the site exceeding the thresholds set for migratory species at bottleneck sites. In India, only three IBAs were selected under this criterion. They are Jatinga in Assam, the Marine National Park and Nalsarovar in Gujarat (Islam & Rahmani 2004).

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Congregation of birds and number of IBAs



than 6 m at low tide lying within the wetlands, especially where these have importance as waterfowl habitat”.

The criteria for identifying wetlands of international importance under the Ramsar Convention, as adopted at the Conference of the Parties on 7 May 1999, fall into eight categories. There is a strong relationship between the Ramsar categories for waterbirds and the IBA criteria. The IBA criteria A1, A4i and A4iii which are equivalent to Ramsar criteria 2, 5 and 6 were used for identifying IBAs. It has been used for both non-breeding populations of waterbirds and for

breeding concentrations of some congregatory species. Ideally, average (preferably five years) of seasonal peak numbers should be used to assess whether the 1% threshold is met, but this was not possible for most sites as we do not have five year data.

Overall the IBA criteria comply with the Ramsar criteria for birds. However, there is one difference: the IBA criteria A4i could be applied to congregations of waterbirds in grassland and marine habitats (not classifiable as wetland habitat under the Ramsar definition). Some of the congregatory sites



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especially 1% thresholds for some waterbirds may be met in grasslands areas (Ramsar Criterion-6), the Ramsar wetland definition excludes these sites from consideration under the Convention, therefore their eligibility for designation as Ramsar Sites has been considered on a case-by-case basis.

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Table: 1% population threshold – of the biogeographic population of waterbirds

English Name	Species	1% Level 2002	Estimate 2002	Location & Breeding range	1% Level 2006	Estimate 2006	Notes
Little Grebe	<i>Tachybaptus ruficollis</i>	10,000	D	SW, Central & S. Asia	10,000	D	B6>200,000 in India
Red-necked Grebe	<i>Podiceps grisegena</i>	100	15,000	Probably Central Asia	100	A	
Great Crested Grebe	<i>Podiceps cristatus</i>	250	B	Central & S. Asia	250	B	
Black-necked Grebe	<i>Podiceps nigricollis</i>	250	25,000	SW, S & Central Asia, Caspian, Persian Gulf	250	25,000	.....
Great White Pelican	<i>Pelecanus onocrotalus</i>	230	15,000-100,000	S. Asia	230	15,000-30,000	.....
Spot-billed Pelican	<i>Pelecanus philippensis</i>	40	2,500-5,000	E. India, Sri Lanka, Myanmar	135	9,000-12,000	D6, estimates Indian population as 8,000-10,000, K6: 2,850-3,700 in Southern India. C16:3,000 in Assam
Dalmatian Pelican	<i>Pelecanus crispus</i>	110	9,800-12,400	SW, S. Asia	75	6,000-9,000	Estimates summed from appropriate countries give 769-1,071 breeding pairs (2,307-3,213 individuals). 2004: 2,000-3,000 pairs (6,000-9,000 individuals).
Great Cormorant	<i>Phalacrocorax carbo</i>	1,000	C	S Asia	1,000	C	Up to 31,000 birds at Qinghai lake in July-Aug in the Late 1990s (L14), B6: Indian Population Estimate 50,000.
Indian Cormorant	<i>Phalacrocorax fuscicollis</i>	300	30,000	S & SE Asia	300	30,000	A9: maximum AWC total >21,000 in 2004
Little Cormorant	<i>Phalacrocorax niger</i>	1,500	150,000	S. Asia	2,500	250,000	B6: Indian Population 200,000. Rest of South Asia should support at least 50,000 birds.
Oriental Darter	<i>Anhing melanogaster</i>	40	4,000	South Asia	40	4,000	
Grey Heron	<i>Ardea cinerea</i>	200	20,000	South Asia	1,000	100,000	Sometimes assigned to rectirostris.
Eastern Great Egret	<i>Ardea modesta</i>	250	25,000	South Asia	1,000	C	Usually included in <i>Ardea (Casmerodius, Egretta) alba</i> . A9: 11,000 counted in south Asia in 2003
Intermediate Great Egret	<i>Ardea intermedia</i>	250	25,000	South Asia	1,000	C	A9: 22,000 counted in south Asia in 2004
White-bellied Heron	<i>Ardea insignis</i>	6	250-1,000	Bhutan, NE India, Bangladesh, & Myanmar, Nepal	6	250-1,000	.....
Goliath Heron	<i>Ardea goliath</i>	1	20	Pakistan to Bangladesh, S to Sri Lanka	1	20	Recent information lacking for this population which appears to be on the brink of extinction.

Table: 1% population threshold – of the biogeographic population of waterbirds

English Name	Species	1% Level 2002	Estimate 2002	Location & Breeding range	1% Level 2006	Estimate 2006	Notes
Purple Heron	<i>Ardea purpurea</i>	250	25,000	South Asia	250	25,000	.....
Cattle Egret	<i>Ardea ibis</i>	.....	D/E	South Asia	.....	D/E	.....
Striated Heron	<i>Butorides striatus</i>	250	25,000	India	250	25,000	.....
Indian Pond Heron	<i>Ardeola grayii</i>	10,000	D	N. Persian Gulf E. through south Asia, Sri Lanka	10,000	D	A9: 35,000 counted in 2002.
Chinese Pond Heron	<i>Ardeola bacchus</i>	.....	C/D	NE & E China & Korea W to Assam; Occasional Japan	.....	C/D	
Little Egret	<i>Egretta garzetta</i>	600	60,000	South Asia	1,500	100,000-200,000	A9: 48,000 counted in 2002.
Black-crown Night Heron	<i>Nycticorax nycticorax</i>	1,000	C	South Asia	1,250	100,000-150,000	B6: Population estimate for India 100,000
Malayan Night Heron	<i>Gorsachius melanophus</i>	.....	.....	SW Asia	.....	.....	.....
Great Bittern	<i>Botaurus stellaris</i>	1,000	C	N India-Myanmar, S & E China, Taiwan, Korea, S. Japan	1,000	C	Sometimes ascribed to <i>orientalis</i> .: Estimate may be too high; only 50-100 winter in S Korea.
Little Bittern	<i>Ixobrychus minutus</i>	250	B	Central & S. Asia	250	B	.....
Yellow Bittern	<i>Ixobrychus sinensis</i>	.....	.....	South Asia	.....	.....	.....
Cinnamon Bittern	<i>Ixobrychus cinnamomeus</i>	.....	C/D	South Asia	.....	C/D	Trend declining in Sri Lanka
Black Bittern	<i>Ixobrychus flavicollis</i>	1,000	C	Pakistan, India, Bangladesh	1,000	C	Sometimes ascribed to genus <i>Dupetor</i> .
Painted Stork	<i>Mycteria NT leucocephala</i>	100	<10,000	Pakistan, India, Nepal	250	25,000	B6: Indian population c. 25,000. Over 8,000 recorded in AWC in 2003.
Asian Openbill	<i>Anastomus oscitans</i>	1,250	>125,000	S & SE Asia	3,000	300,000	L16: 60,000 recorded in S. Asia in AWC 2002. B6: Indian population 100,000.
Black Stork	<i>Ciconia nigra</i>	100	A	W & Central Asia, S. Russia, Xinjiang, Mangolia	100	A	Estimates 1,679-2,494 breeding pairs (5,037-7,482 individuals) for both populations combined
Woolly-necked Stork	<i>Ciconia episcopus</i>	250	A/B	India to Indochina & Philippines	250	A/B	.....
European White Stork	<i>Ciconia ciconia</i>	45	4,350	Central Asian Republics	45	4,350	Total: 1,440-1,450 pairs (4,320-4,350 individuals).

Table: 1% population threshold – of the biogeographic population of waterbirds

English Name	Species	1% Level 2002	Estimate 2002	Location & Breeding range	1% Level 2006	Estimate 2006	Notes
Black-necked Stork	<i>Ephippiorhynchus asiaticus</i> NT	10	1,000	S, SE Asia	10	1,000	Reports 200-250 in Two Districts of Uttar Pradesh and suggests a total population of 1,000.
Lesser Adjutant	<i>Leptoptilos javanicus</i>	50	5,000	S & SE Asia	50	5,000	Estimate may require upward revision in the Light of recent estimate of 2,000 in Assam.
Greater Adjutant	<i>Leptoptilos dubius</i> EN	7	650-800	Assam, India	7	650-800	Estimate 650-800 Individuals.
Black-headed Ibis	<i>Threskiornis melanocephalus</i> NT	100	A	South Asia	250	25,000	Indian Population estimated at 20,000, L16: 6,750 recorded by AWC in 2002
Indian Black Ibis	<i>Pseudibis papillosa</i>	100	10,000	India, S Pakistan, S. Nepal	100	10,000	
Glossy Ibis	<i>Plegadis falcinellus</i>	250	B	Central, S, SE Asia.	250	B	
Eurasian Spoonbill	<i>Platalea leucorodia</i>	230	23,000	Central & SW & S Asia	1,000	C	Often included in Nominat. B6:>25,000 estimated in India.
Greater Flamingo	<i>Phoenicopterus ruber</i> NT	2,900	290,000	Iran, Kazakhstan, Pakistan, India	2,400	240,000	January 2003 counts of non Breeding birds in some sites of Gujarat State, India were 42,723. Recent count s in the Rann of Kachchh, if confirmed, may justify increasing the estimate.
Lesser Flamingo	<i>Phoenicopterus minor</i> NT	1,500	150,000	NW India, SE Pakistan	3,900	390,000	388,000 counted in some sites of Gujarat state, India in January 2003
Fulvous Whisting Duck	<i>Dendrocygna bicolor</i>	200	20,000	S. Asia, Myanmar	500	50,000	40,000 in AWC 2003 in South Asia. Indian Population estimate 25,000
Lesser Whisting Duck	<i>Dendrocygna javanica</i>	10,000	D	South Asia	10,000	D	180,000 counted in India in 2003. 110,000 Birds recorded in AWC 2004, with up to 100,000 from Thailand
Greylag Goose	<i>Anser anser</i>	150	15,000	Central Asia	250	25,000	15,000 estimated in India.
Bar-headed Goose	<i>Anser indicus</i>	560	52,000-60,000	Kyrgyzstan, C China, Tibet, Mongolia	560	52,000	A peak count from 1999-2000 of 52,000 breeding at Qinghai Lake
Ruddy Shelduck	<i>Tadorna ferruginea</i>	500	50,000	Central Asia	500	50,000	AWC 2002 recorded 35,000 in South Asia. B6: Population in India estimated at 40,000.
Common Shelduck	<i>Tadorna tadorna</i>	1,000	C	Central Asia	1,000	C	10,000 winter in NW India & Pakistan and in Myanmar, 20,000 in Bangladesh in 2001
White Winged Duck	<i>Cairina scutulata</i> EN	5	450	India-Bangladesh- Myanmar	5	450	.....

Table: 1% population threshold – of the biogeographic population of waterbirds

English Name	Species	1% Level 2002	Estimate 2002	Location & Breeding range	1% Level 2006	Estimate 2006	Notes
Comb Duck	<i>Sarkidiornis melanotos</i>	60	6,000	South Asia, Myanmar, Cambodia rarely Thailand, Laos, Vietnam	250	B	B6 estimates the Indian population at 10,000.
Cotton Pygmy-Goose	<i>Nettapus coromandelianus</i>	1000	C	South Asia	1,000	100,000	56,000 counted by AWC in 2002 B6: Indian Population estimated at 100,000.
Eurasian Wigeon	<i>Anas penelope</i>	2,500	250,000	Central Serbia	2,500	250,000	Indian Population estimated at 200,000.
Falcated Duck	<i>Anas falcata</i>	.....	.....	Mongolia, NE China, SE Siberia to Hokkaido and southern Kuril Is	350	35,000	Japanese population 9,000; Korean population 2,000, B17; 18,364 counted in middle and lower Yangtze river, China in 2004. G6: 10,000 migrate through Kamchatka Peninsula in spring.
Gadwall	<i>Anas strepera</i>	1,500	150,000	Central Asia	3,000	300,000	Highest AWC count of over 230,000 birds in South Asia in 2002.
Baikal Teal	<i>Anas formosa</i>	3,000	300,000	E Siberia to Kamchatka	5,000	500,000	The AWC 2004 count in Korea was 455,000 birds. Numbers in the other countries tiny by comparison. L11 reported a count of 658,000 in Korea in 2004. This may be over-estimated
Common Teal	<i>Anas crecca</i>	4,000	400,000	South Asia	4,000	400,000	.....
Mallard	<i>Anas platyrhynchos</i>	750	75,000	S Asia	750	75,000	30,000 estimated in India.
Spot-billed Duck	<i>Anas poecilorhyncha</i>	500	50,000	S Asia	1,000	100,000	Indian Population estimated at 100,000.
Northern Pintail	<i>Anas acuta</i>	.....	D/E	Central Serbia, Central Asia	.....	E	650,000 counted in S Asia in 2002-2004
Garganey	<i>Anas querquedula</i>	2,500	250,000	W & Central Siberia	3,500	350,000	Estimate for India 300,000.
Northern Shoveler	<i>Anas clypeata</i>	10,000	D	Central Siberia, Central Asia	7,500	500,000- 1,000,000	245,000 counted by AWC in 2001, 270,000 in 2002 and 180,000 in 2003, B6 estimate 400,000 in India
Marbled Teal	<i>Marmaronetta angustirostris</i>	50	5,000	SW Asia, C Asia, Extreme W China	50	5,000	
Pink-headed Duck	<i>Rhodonessa caryophyllacea</i>	1	<50	NE India, Myanmar	1	<50	Last recorded in 1949.
Red-crested Pochard	<i>Netta rufina</i>	1,000	C	Central Asia	1,000	100,000	68,182 in AWC 2001, over 60,000 in 2002 and 2003. B6: Indian population estimated at 70,000.
Common Pochard	<i>Aythya ferina</i>	10,000	D	Central Asia	3,500	200,000- 500,000	160,000 recorded in AWC 2002 B6: Indian population estimated at 100,000.

Table: 1% population threshold – of the biogeographic population of waterbirds

English Name	Species	1% Level 2002	Estimate 2002	Location & Breeding range	1% Level 2006	Estimate 2006	Notes
Baer's Pochard	<i>Aythya baeri</i>	150	10000-20000	SE Siberia, NE China	150	10,000- 20,000	Declining significantly in the east of the range
Ferruginous Duck	<i>Aythya nyroca</i>	.....	.....	Central Asia to W China & W Mongolia	1,000	100,000	Tens of thousands breed in Inner Mongolia and common on Tibetan Plateau. >90,000 on Hoars of NE Bangladesh, Jan 2002. Considers declines in Asia to be very serious.
Tufted Duck	<i>Aythya fuligula</i>	10,000	D	W & Central Siberia	4,000	300,000- 500,000	Indian Population estimated at 300,000.
Goosander, Common Merganser	<i>Mergus mergamser</i>	60	2,500-10,000	Mountains of Central Asia	60	2,500-10,000	Sometimes ascribed to <i>comatus</i> .
White-headed Duck	<i>Oxyura leucocephala EN</i>	1	10	Central Asia	1	<50	Population wintering in Pakistan declined from >1,000 in late 1960s to 733 in 1987, to 150 in early 1990s 50 in late 1990s and 5 in 2001. Numbers recovered slightly and 33 and 24 were recorded in Pakistan in January 2003 and 2004 respectively
Siberian Crane	<i>Grus leucogeranus CR</i>	1	2	Kunovat River basin, NW Russia	1	0	Last pair seen on Breeding grounds in Summer 2002
Sarus Crane	<i>Grus antigone VU</i>	90	8,000-10,000	Pakistan, N India, Nepal	90	8,000-10,000	Decline in Gujarat and Rajasthan possibly being balanced by increase in Utter Pradesh (Gopi Sunder in Litt).
Demoiselle Crane	<i>Grus virgo</i>	1,000	100,000	W, Central Asia	850	70,000- 100,000	122,000 counted in India in 2003 (Two Population Combined).
Common Crane	<i>Grus grus</i>	700	70,000	W Siberia & Kazakhstan	700	70,000	Information Provided By George Archibald, October 2001. A9: 53,000 counted in India in 2003.
Black-necked Crane	<i>Grus nigricollis VU</i>	60	6,000	Extremely NW India E to W & Central China	80	8,000	Counts of 4,277 in Xizhang in December 1999 and 3,562 in Yunnan and Guizhou in winter of 2003 suggested population of around 8,000.
Red-legged Crane	<i>Rallina fasciata</i>	.....	.....	Lowlands NE India, SW Indochina E to Philippines, S to E Indonesia	.....	.....
Slaty-legged Crane	<i>Rallina eurizonoides</i>	.....	.....	Pakistan & India E to Assam	.....	.....
Slaty-breasted Rail	<i>Gallirallus striatus</i>	.....	.....	India & Sri Lanka to SC China & Thailand	.....	.....	.....

Table: 1% population threshold – of the biogeographic population of waterbirds

English Name	Species	1% Level 2002	Estimate 2002	Location & Breeding range	1% Level 2006	Estimate 2006	Notes
Water Rail	<i>Rallus aquaticus</i>	.....	.....	Aral Sea-L Balkhash S to Iran, Kashmir, WC China	.....	.....
Brown Crane	<i>Amaurornis akool</i>	.....	.....	India, Bangladesh, W Myanmar	.....	.....
White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	.....	D/E	South Asia, Indochina to E China, Taiwan, Ryukyu, Malaysia, Philippines, Greater Sundas and Andaman & Nicobar Is.	.....	D/E	Sometimes ascribed to <i>Chinensis</i>
Black-tailed Crake	<i>Amaurornis bicolor</i>	.....	.....	NE India & Myanmar E to S C China, NW Vietnam	.....	.....	.....
Little Crane	<i>Porzana parva</i>	.....	.....	Central Asia To W Xingjiang	.....	.....	.....
Baillon's Crane	<i>Porzana pusilla</i>	.....	.....	E Europe, C & E Asia to N China, Japan, S to Iran, N India	.....	.....
Spotted Crane	<i>Porzana porzana</i>	.....	.....	N. Central Asia E to NW China, S to Iran	.....	.....	.....
Ruddy-breasted Crake	<i>Porzana fusca</i>	.....	.....	W India & Sri Lanka	.....	.....	Population in Sri Lanka 10,000-20,000
Watercock	<i>Gallixrex cinerea</i>	.....	.....	South Asia E to C & E China, Taiwan, S to Philippines, Indochina, Malaysia, W Indonesia	.....	.....	.....
Purple Swamphen	<i>Porphyrio porphyrio</i>	.....	.....	From S & E Pakistan through India, Sri Lanka, Bangladesh, N Myanmar to SW China & N Thailand	.....	.....	44,000 Recorded in AWC 2002 in S Asia.
Common Moorhen	<i>Gallinula chloropus</i>	.....	.....	Central & S Asia	.....	.....	39,000 counted in AWC 2002 in South Asia.

Table: 1% population threshold – of the biogeographic population of waterbirds

English Name	Species	1% Level 2002	Estimate 2002	Location & Breeding range	1% Level 2006	Estimate 2006	Notes
Common Coot	<i>Fulica atra</i>	15,000	1,500,000	Central & S Asia	15,000	1,500,000	.....
Masked Finfoot	<i>Heliopais personata VU</i>	60	2,500-10,000	NE India SE to Vietnam, Malaysia, Sumatra	60	2,500-10,000	.....
Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	1,000	C	S Asia, SE Asia, S China, Taiwan, Philippines	1,250	100,000-150,000	Declining in E Asia, but may be stable in S & SE Asia A9: 30,000 counted in India in 2002 B6: Estimate of Indian Population 100,000.
Bronze-winged Jacana	<i>Metopidius indicus</i>	.....	.....	S Asia, Indochina, Sumatra	750	50,000-100,000	Birds in Sumatra may be a separate population A9: 26,000 counted in India in B6: Estimate of Indian Population 50,000.
Greater Painted snipe	<i>Rostratula benghalensis</i>	.....	.....	S & SE & E Asia, Indonesia	250	B	Estimate of Indian Population >10,000.
Crab Plover	<i>Dromas ardeola</i>	700	60,000-80,000	NW Indian Ocean, Red Sea, Persian Gulf, NW Sri Lanka	700	60,000-80,000	20,000-30,000 in Asia. S31: Breeds in NW Sri Lanka
Eurasian Oystercatcher	<i>Haematopus ostralegus</i>	1,500	100,000-200,000	Black Sea, Asia Minor to W Siberia, NW Iran, Central	1,500	100,000-200,000	B6: 2,000 Winter in India
Black-winged Stilt	<i>Himantopus himantopus</i>	10,000	D	South Asia	1,750	150,000-200,000	Indian population estimated at 150,000.
Pied Avocet	<i>Recurvirostra avosetta</i>	1,000	B/C	Central Asia	1,000	B/C	14,200 recorded in AWC 2003. B6: Numbers decreased dramatically on East coast of India between 1985 and 2005.
Stone-curlew, Eurasian Thick-knee	<i>Burhinus oedicnemus</i>	.....	.....	India & Sri Lanka E to Indonesia	.....	.....	500-1,000 in Sri Lanka
Stone-curlew, Eurasian Thick-knee	<i>Burhinus oedicnemus</i>	.....	.....	Central Asia, Iran, Pakistan, NW India	.....	.....	.....
Great Thick-knee, Great Stone Plover	<i>Burhinus(Esacus) recurvirostris</i>	.....	.....	SE Iran, S Asia to Indochina & S China	250	A/B	Estimate for Indian Population 2,000; Estimate for Sri Lanka, 250-500
Oriental Pratincole	<i>Glareola maldivarum</i>	.....	C/D	India, Sri Lanka	1,000	B/C	Indian Population estimated at > 10,000.
Small Pratincole	<i>Glareola lactea</i>	1,000	B/C	S Asia, NW & C Indochina	750	50,000-100,000	Indian Population estimated at 50,000-100,000.
Northern Lapwing	<i>Vanellus vanellus</i>	250	B	Central Asia	250	B	.....

Table: 1% population threshold – of the biogeographic population of waterbirds

English Name	Species	1% Level 2002	Estimate 2002	Location & Breeding range	1% Level 2006	Estimate 2006	Notes
River Lapwing	<i>Vanellus duvaucelli</i>	250	A/B	NC India, Nepal, E to SC China, Indochina	250	A/B	.....
Yellow-wattled Lapwing	<i>Vanellus malabaricus</i>	.....	.....	S Pakistan, India, Bangladesh, Sri Lanka	75	5,000-10,000	Indian Population estimated at 3,000, S31; 500-1,000 in Sri Lanka
Grey-headed	<i>Vanellus cinereus</i>	1,000	C	NE China, Neighbouring Russia, Japan	1,000	C	.....
Red-wattled Lapwing	<i>Vanellus indicus</i>	.....	.....	South Asia	500	50,000	Indian Population estimated at 30,000.
Sociable Lapwing	<i>Vanellus gregarius</i>	2	200-600	S. C Russia & Kazakhstan	4	200-600	.....
White-tailed Lapwing	<i>Vanellus leucurus</i>	1,000	B/C	Central Asian Republics	1,000	B/C	.....
Pacific Golden Plover	<i>Pluvialis apricaria</i>	750	50,000- 100,000	North C & E Siberia	750	50,000- 100,000	Indian Wintering Population estimated at 50,000.
Grey Plover	<i>Pluvialis squatarola</i>	300	30,000	Arctic Russia	300	30,000	Indian Wintering Population estimated at 15,000.
Long-billed Plover	<i>Charadrius placidus</i>	100	A	Russia Far East , EC to NC China, Korea, Japan	250	A/B	Estimates probably below 10,000
Little Ringed Plover	<i>Charadrius dubius</i>	.....	.....	Indian Subcontinent, Sri Lanka & SE Asia	1,000	C	Indian Population estimated at 20,000.
Kentish Plover	<i>Charadrius alexandrinus</i>	1,000	C	Central Asia	750	50,000- 100,000	(A) Indian population Estimated at 40,000
Kentish Plover	<i>Charadrius alexandrinus</i>	75	5,000-10,000	Sri Lanka, SE India	90	8,000-10,000	(B) Indian Population estimated at 7,000.
Mongolian Plover	<i>Charadrius mongolus</i>	.....	.....	Himalaya, S Tibet	1,000	120,000- 150,000	(A) Indian Population estimated at 120,000
Mongolian Plover	<i>Charadrius mongolus</i>	1,000	100,000	Central Asia	1,250	120,000- 150,000	(B) Indian Population estimated at 10,000; fewer in SW Asia and Africa
Greater Sand Plover	<i>Charadrius leschenaultii</i>	1,000	C	Central Asia	1,000	C	Indian Population estimated at 12,000.
Eurasian Woodcock	<i>Scolopax rusticola</i>	.....	C/D	Central Asia to Sakhalin & Japan	.....	C/D	.....

Table: 1% population threshold – of the biogeographic population of waterbirds

English Name	Species	1% Level 2002	Estimate 2002	Location & Breeding range	1% Level 2006	Estimate 2006	Notes
Wood Snipe	<i>Gallinago nemoricola</i> VU	60	2,500-10,000	Himalayas NW India, S & E Tibet, Nepal Bhutan	60	2,500- 10,000	
Pintail Snipe	<i>Gallinago stenura</i>	.....	C/D	Central Siberia- Sea of Okhotsk	.....	C/D	Presumed to breed predominantly in eastern half of Siberia
Swinhoe's Snipe	<i>Gallinago megala</i>	1,000	C	CS Siberian N Mongolia, SE Russia & NE China	1,000	C	.....
Common Snipe	<i>Gallinago gallinago</i>	.....	D/E	North Central Asia to Kamchatka W Aleutians	10,000	D	Indian wintering population estimated at 40,000.
Jack Snipe	<i>Lymnocyptes minimus</i>	.....	.....	Central & E Siberia	250	A/B	Indian population estimated at 3,000.
Solitary Snipe	<i>Gallinago solitaria</i>	1,000	B/C	Mountain of Central Asia- SC Siberia	1,000	B/C	.....
Asian Dowitcher	<i>Limnodromus semipalmatus</i> NT	230	23000	W, C & E Siberia, Mangolia, N Manchuria	230	23,000	Indian Wintering population estimated at 800.
Black-tailed Godwit	<i>Limosa limosa</i>	1,000	100,000	Central Asia, Siberia	1,500	150,000	A9: >110,000 and 126,000 counted in India in 2002 and 2003 respectively.
Bar-tailed Godwit	<i>Limosa lapponica</i>	1,300	100,000- 150,000	C Siberia; Lena to Chaunsk Bay	1,300	100,000- 150,000	.....
Whimbrel	<i>Numenius phaeopus</i>	1,000	C	Central, E Siberia	1,000	C	.....
Eurasian Curlew	<i>Numenius arquata</i>	1,000	B/C	Siberia	1,000	B/C	Indian Population estimated at 9,000
Spotted Redshank	<i>Tringa erythropus</i>	250	B	North Siberia	250	B	Indian Population estimated at 8,000
Common Redshank	<i>Tringa totanus</i>	1,000	C	Pamirs, N India, C& S Tibet.	10,000	100,000	Indian Population estimated at 100,000. Only a few thousand in Sri Lanka
Marsh Sandpiper	<i>Tringa stagnatilis</i>	.....	C/D	Siberia	1,000	100,000	Indian Population estimated at 60,000.
Common Greenshank	<i>Tringa nebularia</i>	1,000	B/C	C Asia, C & E Siberia	750	50,000- 100,000	Indian Population estimated at 40,000
Nordmann's Greenshank	<i>Tringa guttifer</i> EN	6	250-1,000	Sakhalin Is & W Okhotsk Sea	8	500-1,000	Former lower limit Population (250) probably too low. L16: c. 100 in Myanmar plus unknown but low numbers in NE India, Bangladesh and Sumatra.

Table: 1% population threshold – of the biogeographic population of waterbirds

English Name	Species	1% Level 2002	Estimate 2002	Location & Breeding range	1% Level 2006	Estimate 2006	Notes
Green Sandpiper	<i>Tringa ochropus</i>	.....	C/D	Central Asia to E Siberia, NE China	1,000	C	Indian population estimated at 25,000
Wood Sandpiper	<i>Tringa glareola</i>	10,000	D	C & E Siberia to Karnataka, Commander Is	1,500	100,000- 200,000	Indian population estimated at 100,000- 200,000.
Terek Sandpiper	<i>Tringa cinerea</i>	1,000	B/C	Boreal Siberia	1,000	B/C	>10,000 in India. S31: Not >50 in Sri Lanka
Common Sandpiper	<i>Tringa hypoleucos</i>	.....	C/D	Central Asia, Siberia	750	50,000- 100,000	Indian population estimated at 50,000.
Ruddy Turnstone	<i>Arenaria interpres</i>	1,000	B/C	High Arctic Siberia	1,000	B/C	Indian wintering population 15,000.
Great Knot	<i>Calidris tenuirostris</i>	35	2,000-5,000	NE Siberia E of Verohoyansk Mts	3,800	380,000	.....
Sanderling	<i>Calidris alba</i>	1,000	C	Severnaya Zemlya, Taymyr, Lena Delta, New Siberian Is	1,000	C	.....
Red-necked Stint	<i>Calidris ruficollis</i>	3,200	315,000	N Siberia E of C taymyr S to N Kamchatka; sporadic W & N Alaska	3,200	315,000	Increasing in Australia (S42) but decreasing in Japan and Korea (M32), suggesting possibility of a shift in wintering range.
Little Stint	<i>Calidris minuta</i>	2,000	200,000	NW & NC Siberia to new Siberian Is & R yana	2,500	200,000- 300,000	Indian population estimated at 200,000.
Temminck's Stint	<i>Calidris temminckii</i>	1,000	C	N Siberia	1,000	C	Indian population estimated at <50,000.
Long-Toed Stint	<i>Calidris subminuta</i>	1,000	C	Disjunction populations SW, C & E Siberia, Commander & kuril Is	250	25,000	Indian population estimated at 6,000.
Curlew Sandpiper	<i>Calidris ferruginea</i>	1,000	100,000	Arctic Siberia Yamal Peninsula N Chukotskiy Peninsula	2,500	200,000- 300,000	Indian population estimated at 200,000.
Dunlin	<i>Calidris alpina</i>	1,000	C	North Central Siberia	1,000	100,000	Indian population estimated at 60,000.
Spoon-billed Sandpiper	<i>Eurynorhynchus pygmeus</i>	30	<3000	Chukotskiy peninsula S to N Kamchatka	30	<3,000	T 15 present an estimate of <1,000 pairs (<3,000 individuals).

Table: 1% population threshold – of the biogeographic population of waterbirds

English Name	Species	1% Level 2002	Estimate 2002	Location & Breeding range	1% Level 2006	Estimate 2006	Notes
Broad-billed Sandpiper	<i>Limicola falcinellus</i>	1,000	B/C	Taymyr peninsula to NE Siberia	1,000	B/C	.....
Ruff	<i>Philomachus pugnax</i>	1,000	C	W, C & E Siberia.	1,000	C	The validity of this as a separate population is under investigation
Great Black-headed Gull	<i>Larus ichthyaetus</i>	1,000	C	Central Asia E to L Balkash, S to Tibet	1,000	C	L14 recorded a peak of 45,300 at one of the principal sites for this population, Qinghai Lake, in July-Aug 1997-2000. Small numbers winter in E Asia.
Brown-headed Gull	<i>Larus brunnicephalus</i>	1,000	100,000	Mountains of S Central Asia	1,500	100,000-200,000	Indian population estimated at 80,000.
Common Black-headed Gull	<i>Larus ridibundus</i>	.....	C/D	Russia, Central Asia	.....	C/D	L16: 33,000 recorded in AWC 2003.
Slender-billed Gull	<i>Larus genei</i>	1,500	150,000	SW Asia to Caspian, E Kazakhstan, Afghanistan, Pakistan, NW India.	1,500	150,000	.....
Gull-billed Tern	<i>Sterna nilotica</i>	1,000	C	Central Asia	800	60,000-100,000	Indian population estimated at >50,000.
Caspian Tern	<i>Sterna caspia</i>	1,000	B/C	Central Asia, Sri Lanka	750	50,000-100,000	Indian population estimated at >50,000.
Lesser Crested Tern	<i>Sterna bengalensis</i>	1,700	150000-180,000	Persian Gulf, Pakistan coast, Maldives & ?Laccadive Is	1,700	150,000-180,000	.....
Crested Tern	<i>Sterna bergii</i>	15	20,000	Persian Gulf, E to Maldives, Sri Lanka, Myanmar	10,000	D	33,000 pairs (99,000 individuals) in the Middle East (34). Many additional breeding sites in the Indian ocean.
River Tern	<i>Sterna aurantia</i>	1,000	B/C	E Pakistan to S India, Nepal, SW China, Myanmar, C Indochina to Mekong Delta	750	50,000-100,000	Indian population estimated at >50,000.
Common Tern	<i>Sterna hirundo</i>	1000	B/C	Mountains W Mongolia S to Kashmir, Tibet, Sichuan	1,000	B/C	B6: 25,000 winter in India (all forms), S31; Breeds in NW Sri Lanka, ssp. Unknown.

Table: 1% population threshold – of the biogeographic population of waterbirds

English Name	Species	1% Level 2002	Estimate 2002	Location & Breeding range	1% Level 2006	Estimate 2006	Notes
Little Tern	<i>Sterna albifrons</i>	250	B	NE India, Myanmar, Sumatra, Java	750	50,000- 100,000	Indian Population estimated at >50,000.
Black-bellied Tern	<i>Sterna acuticauda</i>	250	B	Pakistan, India, Nepal, E to SW China, S to S Vietnam	250	B	Indian Population estimated at <2,000.
Bridled Tern	<i>Sterna anaethetus</i>	1500	150000	Red Sea, Persian Gulf, Arabian Sea, W India	10,000	D	(B) 130,000 Breeding pairs (390,000 individuals) in Eastern red Sea
Sooty Tern	<i>Sterna fuscata</i>	20,000	>13,500,000	Gulf of Aden, Coastal E Africa, Indian Ocean- Madagascar - Andaman Is; Philippines - S Japan	20,000	>13,500,000	D17: present details of an estimate to telling 13,500,000 in the W Indian Ocean Islands and E African coast alone. For populations over 2 million birds, Ramsar Convention criterion 5 (20,000 or more waterbirds) applies.
Whiskered Tern	<i>Chlidonias hybridus</i>	1,000	C	E Iran, Pakistan, N India	1,000	C	(A) Estimate of 150,000 for <i>Indica</i> + <i>hybrida</i> wintering in India
Whiskered Tern	<i>Chlidonias hybridus</i>	.....	.....	NE India Myanmar	1,000	C	.....
White-winged (Black) Tern	<i>Chlidonias leucopterus</i>	.....	C/D	Central & E Siberia, N Mongolia- SE Russia, NE China	.....	C/D	B6: An estimated 10,000 winter in India. J4: Large aggregations (Many thousands, e.g, record of 15,000) occur in N Australia during the Monsoon and cyclone period (Nov-April), with similar flocks inland and on S coast late in this period
White Tern	<i>Gygis alba</i>	10,000	D	Indian ocean NE China	10,000	D	.....
Indian Skimmer	<i>Rynchops albicollis</i>		2,500-10,000	E Pakistan, N & E India, Bangladesh, Myanmar; possibly extinct along Mekong River	80	6,000- 10,000	L18: 5,542 recorded in AWC 2001. B6: estimated population 2,500.
Roseate Tern	<i>Sterna dougallii</i>	100	A	Sri Lanka Andaman Is, SW Myanmar	100	A	.....

The provisional 1% threshold set on the basis of coded ranges are as follows

A(<10000) 1% threshold 100, B(10000-25000) 250, C(25000-100000) 1000, D(100000-1000000) 10000, A/B(<25000) 250, B/C(10000-100000) 1000

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IBCN MISSION STATEMENT

To promote conservation of birds and their habitats through the development of a national network of individuals, organisations and the government

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